HAWKING TECHNOLOGY

Hi-GainN™ Wireless N

HWDN1

Hi-Gain™ Wireless-300N USB Network Dish Adapter

PACKAGE CONTENTS:

- One Wireless-300N USB Dish Adapter
- One USB Cable
- Quick Installation Guide
- One CD (Includes Software & Manual)

Connect Your Laptop or Desktop to Your Wireless Network and Surf the Internet at Blazing Speeds of up to 300Mbps!

The Hawking Hi-Gain Wireless-300N USB Dish Adapter extends your wireless network 6 times and boosts your data throughput 12 times! It is capable of transfering data at up to 300Mbps. The Wireless-300N USB Dish Adapter is designed with advanced Directional Dish Technology for excellent range and performance. A built-in dual antenna concentrates wireless signals for extended wireless range of up to 600%*, compared to a standard network adapter. It is the most powerful 802.11n Wireless Networking Adapter on the market. Furthermore, it is backward compatible with Wireless 802.11b and 802.11g and will operate on the highest throughput that your network allows.

Installation of the HWDN1 Wireless-300N Dish Adapter is simple and straight forward - run the setup CD and connect the Dish Adapter to your notebook or desktop through an available USB port. To achieve the maximum wireless range and performance, direct the HWDN1 towards a wireless source and you are ready to connect!

Features

- Extends Network Coverage 6x using MIMO & Hi-Gain Dish Technology
- Boosts Data Throughput 12x
- Excellent Solution for Media-Intensive Activities with up to 300Mbps Data Transfer Rate
- Supports WEP, WPA (PSK, TKIP), and WPA2 (AES) Security Encryption for the highest level of security
- Setup is quick and simple

System Requirements:

- Windows 2000/XP/Vista
- One Available USB Port
- Wireless 802.11 b/g/n* Network (i.e. Access Point or Wireless Device)

*Results may vary due to different operating environments.

Hi-Gain Wireless-300N USB Network Dish Adapter

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HWDN1

Hi-GainN™
Wireless N

SPECIFICATIONS

Network Specifications:

- Windows 2000/XP/Vista
- IEEE 802.11 b/g/n
- Security: WEP 64, 128, 152bit WPA (PSK, TKIP), WPA (AES)

Electrical Properties

- Frequency: 2.412~2.462GHz
- Operating Voltage: 5V
- LED indicator: Solid Green & Blinking Mode

Mechanical Properties

- Connector: USB 2.0/1.1

Material Properties

- Color: White
- Dimensions: (L x W x H) 4.17 x 4.90 x 5.14 in
- Weight: 6.7 oz

Warranty

- 1 year

RELATED PRODUCTS

HWUN1	Hi-Gain USB Wireless-300N Network Dish Adapter
HWRN1	Hi-Gain Wireless-300N Router

Hi-Gain Range Extending Products

HAI7SIP	Hi-Gain 7dBi Omni-Directional Antenna
HAI7MD	Hi-Gain 7dBi Directional Antenna
HAI15SC	Hi-Gain 15dBi Corner Antenna
HAO9SIP	Hi-Gain 9dBi Outdoor/Indoor Omni-Directional Antenna Kit
HAO9SDP	Hi-Gain 9dBi Outdoor/Indoor Directional Antenna Kit
HAO14SDP	Hi-Gain 14dBi Outdoor/Indoor Directional Antenna Kit
HAO15SIP	Hi-Gain 15dBi Outdoor/Indoor Omni-Directional Antenna Kit

READY, NETWORK &GO

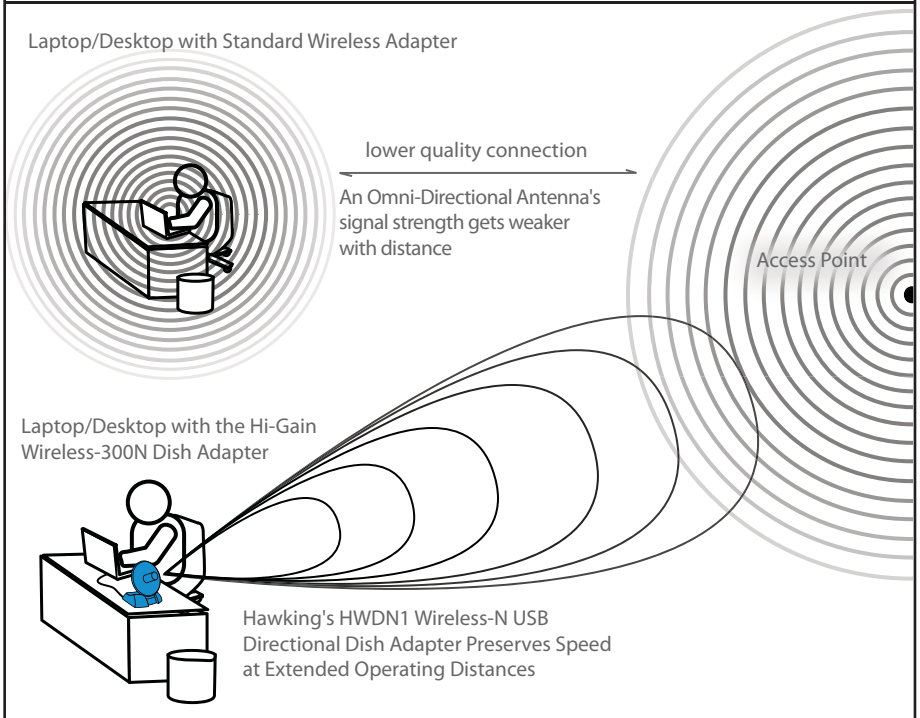
It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Run the Setup Wizard

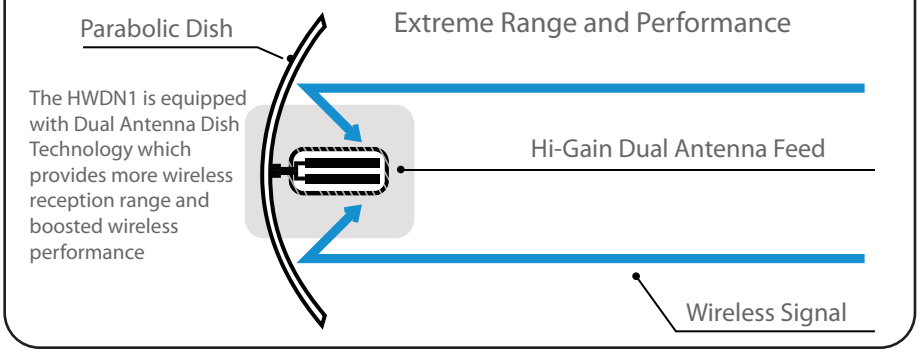
Step 2 - Plug in the Wireless-N USB Adapter

Step 3 - Find your Wireless Network

DISH ANTENNA VS STANDARD ANTENNAS


Laptop/Desktop with Standard Wireless Adapter
lower quality connection
An Omni-Directional Antenna's signal strength gets weaker with distance
Access Point
Laptop/Desktop with the Hi-Gain Wireless-300N Dish Adapter
Hawking's HWDN1 Wireless-N USB Directional Dish Adapter Preserves Speed at Extended Operating Distances

Hi-Gain Dual Antenna Dish Technology


Parabolic Dish
Extreme Range and Performance
The HWDN1 is equipped with Dual Antenna Dish Technology which provides more wireless reception range and boosted wireless performance
Hi-Gain Dual Antenna Feed
Wireless Signal

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HAWKING TECHNOLOGY

compatible with Hi-Gain™ 24
Range Extending WiFi Antennas

HWUG1

Wireless-G USB Adapter

with Removable Antenna

PACKAGE CONTENTS:

- One Wireless-G USB Network Adapter
- One Dipole Antenna
- One CD (Driver/Utility/User's Manual)
- One Quick Installation Guide

Wireless-G Networking with Optional Antenna Upgrades for Extended Wireless Range!

Hawking Technology's HWUG1, 2.4Ghz Wireless-G USB 2.0 Network Adapter with removable antenna, packs the latest wireless technology into a compact unit, capable of transferring data at speeds up to 54Mbps and 108Mbps, capable when paired with the Hawking HWRGM1A Mimo Router. The external dipole antenna can easily be removed and upgraded to a Hawking Hi-Gain Antenna for extended wireless range.

For piece-of-mind wireless security, the HWUG1 supports 64/128-bit WEP data encryption that protects your wireless network from eavesdropping. It also supports the WPA and WPA2 (Wi-Fi Protected Access) security standards that combines IEEE 802.1x and TKIP (Temporal Key Integrity Protocol) technologies. Client users are required to authorize before accessing to APs or AP Routers, and the data transmitted in the network is encrypted/decrypted by a dynamically changed secret key.

Features

- Works with both IEEE 802.11b and IEEE 802.11g products.
- Removable antenna with reverse SMA connector – upgradeable to a higher power antenna for a wider wireless coverage. (For the best result, pair the HWUG1 with a Hawking Hi-Gain Antenna)
- Signal strength indicator shows current wireless signal reception information
- High-speed transfer data rate - up to 54Mbps
- Supports Turbo Mode to enhance the data transfer speed within a specific wireless network.
- Supports WMM (IEEE 802.11e QoS standard)- High throughput allows for the transfer of data heavy multi-media files.
- Supports 64/128-bit WEP, WPA (TKIP with IEEE 802.1x) and AES functions for the highest level of security.
- Automatic fallback increases data security and reliability.
- Supports the most popular operating systems: Windows 98SE/Me/2000/XP/2003 Server
- USB2.0 Compliant & Bus powered

System Requirements

- Pentium Compatible CPU or above
- Windows 98SE, ME, 2000, XP, 2003 servers
- One Available USB Port
- One Available CD-Rom For Driver Installation

Wireless-G USB Adapter with Removable Antenna

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EUROPE: Rotterdam, The Netherlands
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Email: sales@hawkingeurope.com Email: customersupport@hawkingeurope.com

HWUG1

compatible with Hi-Gain™ 24
Range Extending WiFi Antennas

2 Year Warranty

OPTIONAL ANTENNA UPGRADES

HAI7SIP	Hi-Gain™ 7dBi Indoor Omni-Directional Antenna
HAI7MD	Hi-Gain™ 7dBi Indoor Directional Antenna
HAI8DD	Hi-Gain™ 8dBi Indoor Directional Antenna
HAO9SIP	Hi-Gain™ 9dBi Outdoor Omini-Directional Antenna Kit
HAO9SDP	Hi-Gain™ 9dBi Outdoor Directional Antenna Kit
HAO14SDP	Hi-Gain™ 14dBi Outdoor Directional Antenna Kit

SPECIFICATIONS

Standard
- IEEE 802.11b/g

Interface
- USB 2.0 Type A

Frequency Band
- 2.4000 ~ 2.4835GHz (Industrial Scientific Medical Band)

Modulation
- OFDM with BPSK, QPSK, 16QAM, 64QAM (11g) BPSK, QPSK, CCK (11b)

Data Rate
- 54/48/36/24/18/12/11/9/6/5.5/2/1Mbps auto fallback

Security
- 64/128-bit WEP Data Encryption, WPA, WPA2, AES and IEEE 802.1x

Antenna
- External Dipole Antenna

Drivers
- Windows 98SE/Me/2000/XP/2003 Server

LEDs
- Power/Link (Pwr/Lnk)

Transmit Power
- 17dBm ± 2dBm

Receive Sensitivity
- -70dBm@54Mbps, -83dBm@11Mbps

Dimensions
- 10(H) x28(W) x 89.6(D) mm

Temperature
- 32~122°F (0 ~50°C)

Humidity
- Max. 10-95% (Non-Condensing)

Certification
- FCC, CE

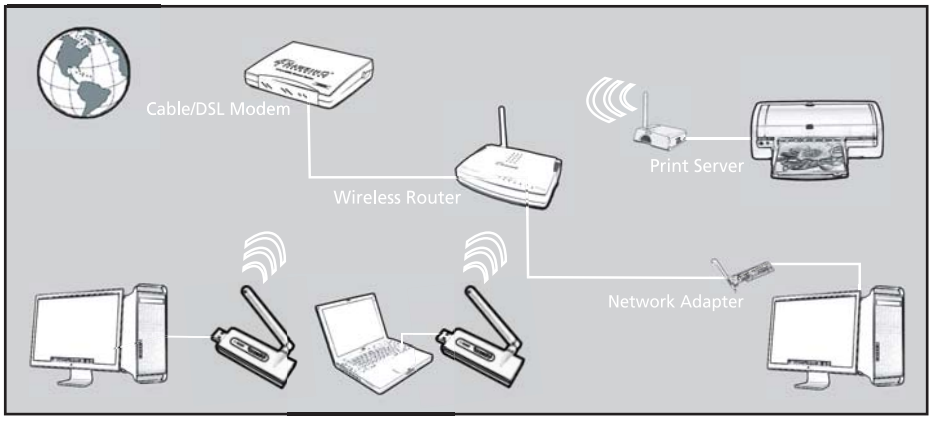
READY, NETWORK AND GO!

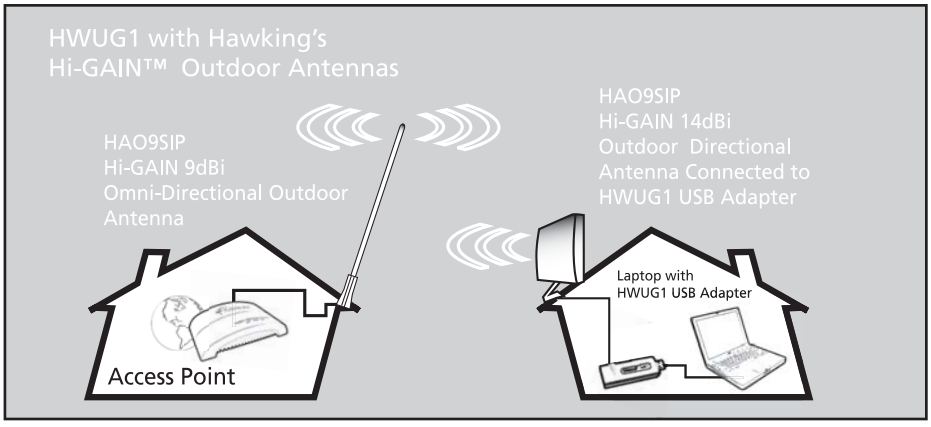
Step 1 - Insert the Setup CD
Power on your PC and insert the setup CD into the CD-Rom Drive.

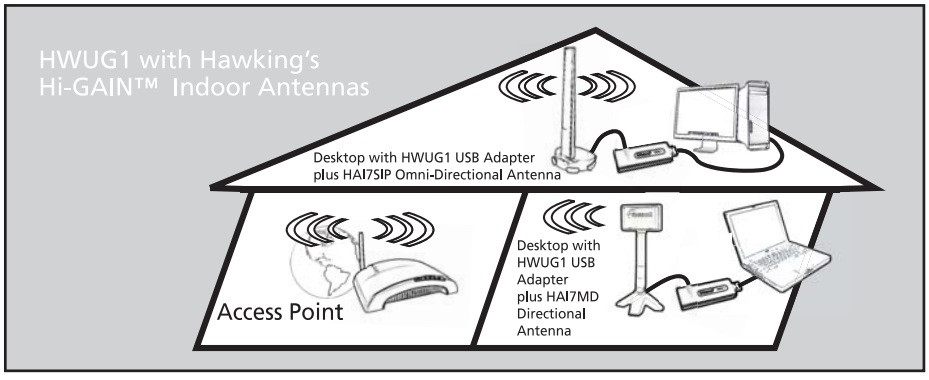
Step 2 - Install Utility and Driver
The setup CD will guide you through the installation process

Step 3 - Plug in the HWUG1
After you have completed the driver installation, insert the HWUG1 firmly into the USB slot and search for wireless signals.

NETWORK DIAGRAM







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HAWKING® TECHNOLOGY

Hi-GainN™ Wireless N

HWUN3

Hi-Gain™ Wireless-N Network USB Adapter

with Upgradable Antenna

PACKAGE CONTENTS:

- One Wireless-N USB Adapter
- One Removable 3dBi Dipole Antenna
- Quick Installation Guide
- One CD (Includes Software & Manual)

Connect Your Laptop or Desktop to Your Home Wireless Network and Internet at a blazing speed of up to 150Mbps!

The Hawking Hi-Gain Wireless-N Network USB Adapter Extends Your Wireless Network 4 times and boosts your data throughput 12 times! It is capable of transfering data at up to 150Mbps. The adapter is engineered with high grade material ensuring maximum quality and performance. Furthermore, it is backward compatible with Wireless 802.11b and 802.11 and will operate on the highest throughput that your network allows.

Installation of the Wireless-N Adapter is simple and straight forward - run the setup CD and connect the Wireless-N Network USB Adapter to your notebook or desktop through an available USB port. The Adapter is designed with an easily removable antenna, enabling quick and easy upgrade to a Hi-Gain Indoor/Outdoor Antenna to achieve Greater Wireless Range and Performance. The Hi-Gain Wireless-N Network Adapter works great with other brands of Wireless-N networking equipment.

Features

- Extends Network Coverage 4x using MIMO technology
- Boosts Data Throughput 12x
- Excellent Solution for Media-Intensive Activities with up to 150Mbps Data Transfer Rate
- Supports WEP, WPA (PSK, TKIP), and WPA2 (AES) Security Encryption for the highest level of security
- Plugs right into an available USB port
- Setup is quick and simple
- Compact Size - very convenient for traveling

System Requirements:

- Windows 2000/XP/Vista
- One Available USB Port
- Wireless 802.11 b/g/n* Network (i.e. Access Point or Wireless Device)

Hi-Gain™ Wireless-N Network USB Adapter
with Upgradable Antennas

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Email: sales@hawkingeurope.com Email: customersupport@hawkingeurope.com

HWUN3

Hi-GainN™
Wireless N

SPECIFICATIONS

Network Specifications:
- Windows 2000/XP/Vista
- IEEE 802.11 b/g/n
- Security: WEP 64, 128, 152bit WPA (PSK, TKIP), WPA2 (AES)

Electrical Properties
- Frequency: 2.4~2.4835 Ghz
- Operating Voltage: 5V
- LED indicator:
  Solid Green & blinking mode

Mechanical Properties
- Connector: USB 2.0/1.1

Material Properties
- Color: White
- Dimensions
  10(H) x 28(W) x 89.6(D)mm.
- Weight: 1.3 oz

Warranty
- 1 year

READY, NETWORK & GO!

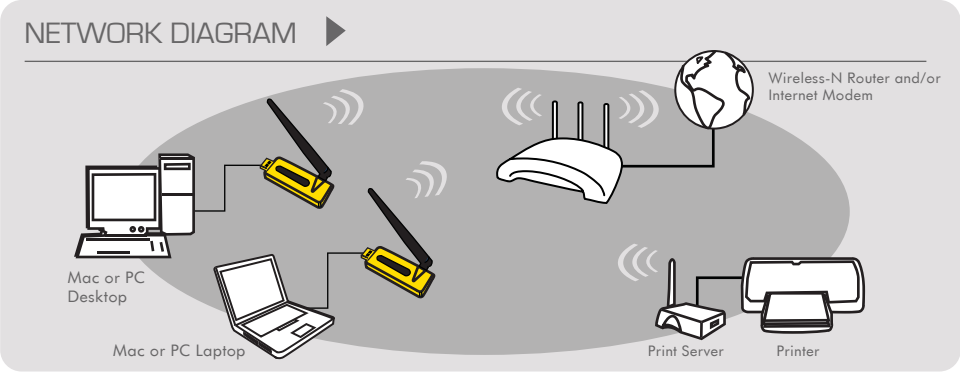
It is easy to install & easy to use.

Step 1 - Run the Setup Wizard

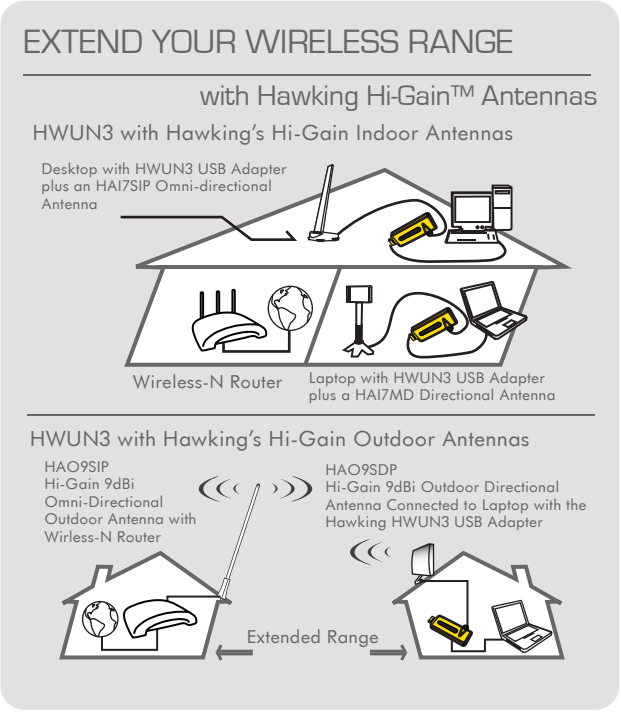
Step 2 - Plug in the Wireless-N USB Adapter

Step 3 - Find your Wireless Network

WIRELESS NETWORK DIAGRAM



EXTEND YOUR WIRELESS RANGE


EXTEND YOUR WIRELESS RANGE
with Hawking Hi-Gain™ Antennas
HWUN3 with Hawking's Hi-Gain Indoor Antennas
Desktop with HWUN3 USB Adapter plus an HAI7SIP Omni-directional Antenna
Wireless-N Router
Laptop with HWUN3 USB Adapter plus a HAI7MD Directional Antenna
HWUN3 with Hawking's Hi-Gain Outdoor Antennas
HAO9SIP Hi-Gain 9dBi Omni-Directional Outdoor Antenna with Wirless-N Router
HAO9SDP Hi-Gain 9dBi Outdoor Directional Antenna Connected to Laptop with the Hawking HWUN3 USB Adapter
Extended Range

RELATED PRODUCTS

HWDN1	Hi-Gain USB Wireless-300N Network Dish Adapter
HWRN1	Hi-Gain Wireless-300N Router

HI-GAIN RANGE EXTENDING PRODUCTS

HAI7SIP	Hi-Gain 7dBi Omni-Directional Antenna
HAI7MD	Hi-Gain 7dBi Directional Antenna
HAI15SC	Hi-Gain 15dBi Corner Antenna
HAO9SIP	Hi-Gain 9dBi Outdoor/Indoor Omni-Directional Antenna Kit
HAO9SDP	Hi-Gain 9dBi Outdoor/Indoor Directional Antenna Kit
HAO14SDP	Hi-Gain 14dBi Outdoor/Indoor Directional Antenna Kit
HAO15SIP	Hi-Gain 15dBi Outdoor/Indoor Omni-Directional Antenna Kit

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HAWKING® TECHNOLOGY

HWRN1A

Hi-Gain™ Wireless N

Hi-Gain Wireless-300N Router

Hi-Gain Wireless-300N Router

Designed For Mac and PC Users

PACKAGE CONTENTS:

- One Hi-Gain™ Wireless-300N Router
- One Power Adapter
- One CD, includes Mac and PC Setup Wizard and User's Manual
- One RJ-45 Ethernet Cable
- Easy to follow Quick Installation Guide

The Hawking HWRN1A Hi-Gain Wireless-300N Router is the best solution for sharing a single broadband internet connection between the computers in your home or office. Using state-of-the-art wireless-300N technology, Hawking delivers the fastest and furthest possible wireless networking experience. At a high speed of 300Mbps, transferring data files, audio and even video has never been more enjoyable. In large homes and offices, wireless dead-spots are easily eliminated with the Wi-Fi range extending capabilities of the HWRN1A (Up to 5 times the distance of the Airport Extreme Base Station).* Along with wireless connectivity, the HWRN1A has 4 wired 100Mbps Ethernet ports for connecting your computers that do not have wireless access.

Installation of the HWRN1A is very simple. In a matter of a few clicks with your mouse, the new Mac or PC based Setup Wizard will automatically configure your Wireless Router for internet access. The Hawking Hi-Gain Wireless Router also offers the latest in wireless security, ensuring that your files and network are safe from outside intruders.

Features

- Great for sharing Music, Movies and Data Files between your home computers
- Works great with Airport Extreme and Airport Wireless Cards
- Ultra Fast Data Transfer speeds and Superior Wireless Range using Hi-Gain™ Technology
- Easy Installation Using the Mac and PC Setup Wizard
- Instantly Share your Internet Access

System Requirements:

- Computer (Mac or PC) with 200MHz or faster processor with CD-Rom
- Internet Web Browser (Internet Explorer 4.0 or better, Safari, Mozilla, etc...)
- 802.11n, 802.11b, 802.11g, Airport Card, Airport Extreme Card or wired network adapter with TCP/IP Protocol Installed
- Compatible Broadband Internet Service

Apple ®, Apple Airport Extreme ®, Mac ®, and Powerbook ® are registered trademarks of Apple Computer, No affiliation is implied or expressed.

*Source: Independent Research Group. Wireless performance may vary due to environmental factors that can cause interference.

Hi-Gain Wireless-300N Router

HWRN1A

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Hi-Gain™ Wireless N

HWRN1A
Hi-Gain Wireless-300N Router

SPECIFICATIONS:

Network Specifications:
- IEEE 802.11b/g/n

Modulation
- 11b:DSSS with CCK, QPSK, BPSK
- 11g:OFDM with 64QAM, 16QAM
- 11n:OFDM with 64QAM, 16QAM, QPSK, BPSK

Transfer Rate
- 11b:1/2/5.5/11M
- 11g:6/9/12/18/24/39/48/54M
- 11n (20MHz):MCS 0-15 (up to 150Mbps)
  11n (40MHz):MCS 0-15 (up to 300Mbps)

Operating Frequency
- 2.4~2.4835 GHz

Security
- 64/128-bit WEP Data Encryption, WPA-PSK (TKIP, AES), WPA2-PSK(TKIP, AES), Radius Server

Antenna
- 3dBi Dipole Hi-Gain Antenna x 3

Power
- 12V DC

Temperature
- 32~104°F (0 ~40°C)

Humidity
- Max. 95% (NonCondensing)

Certification
- FCC , CE

READY, NETWORK & GO!

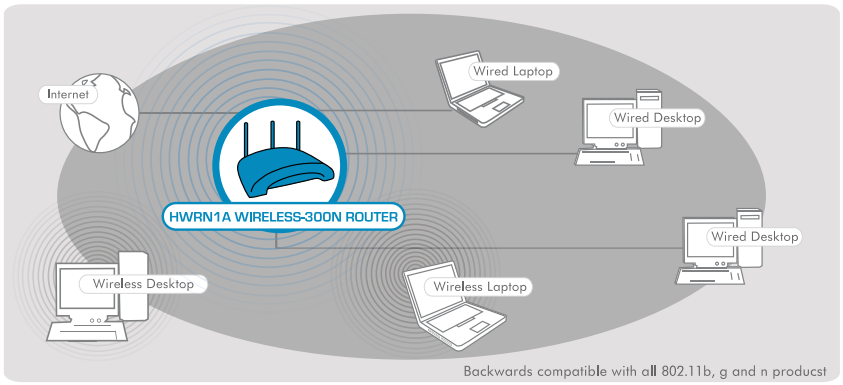
It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Connect the Hardware
Connect the router to your broadband modem and power on.

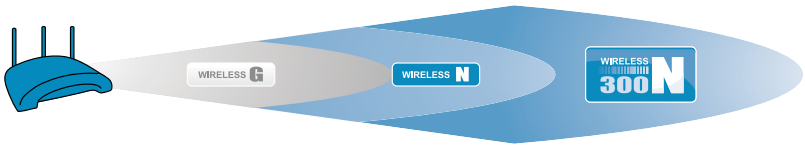
Step 2 - Insert the Setup CD
Insert the included setup CD into your CD-Rom drive and run through the setup options.

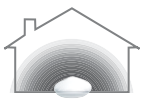
Step 3 - Surf the Web Wirelessly
Place your router in your desired location and enjoy wireless internet access throughout your home or office.

WIRELESS NETWORK DIAGRAM:

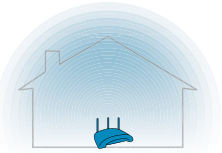


Wireless Range Comparison

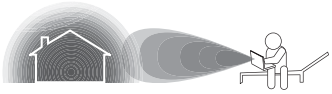




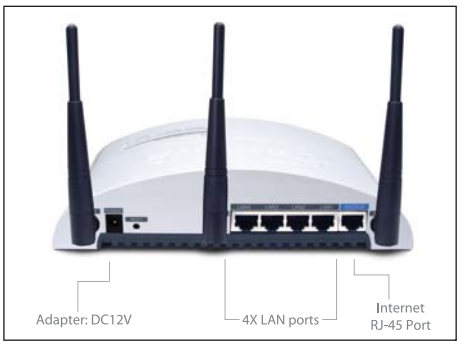
Standard Wireless-G Router or Base Station



Hawking Hi-Gain Wireless-300N Router



For even greater range, use with Hawking's Hi-Gain Wireless Adapters for Mac's and PC's



Rear Ports

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HAWKING® TECHNOLOGY

2.4 GHz

HWREG1

Wireless-G Range Extender

HWREG1
Wireless-G Range Extender

PACKAGE CONTENTS:
- One Wireless-G Range Extender
- One CD, includes Advanced 3-Minute Easy Setup Wizard and Manual
- Easy to follow Quick Installation Guide
- One Power Adapter
- One Standard Dipole Antenna

Extend the Range of your Wireless Network
The HWREG1 effectively doubles the operating distance of your entire wireless network. Whether its an area in your home that has limited or no wireless coverage or a warehouse in your office, the Hawking Wireless-G Range Extender takes the signal from your wireless access point and retransmits it at a higher rate. Simply place the Range Extender halfway between your Wireless Access Point and wireless trouble spot. The HWREG1 is the ONLY wireless repeater on the market that supports most wireless 802.11b/g networks and devices so you never have to worry whether the wireless network you have at your home or office will work with the Range Extender. The HWREG1 also features a new software setup wizard for hassle free installation. To setup the Range Extender you simply load the CD and scan for a network to extend.

Features
- Doubles the Range of your Wireless Network
- The Only Repeater that Works with MOST 802.11b/g Networks and Wireless Access Points
- New Setup Wizard allows for quick and easy setup

- Eliminate any Wireless Dead Spot in your Home or Office

Systems Requirement:
- Pentium compatible or above w/ CD-Rom
- 802.11b or 802.11g Wireless Network

Wireless-G Range Extender

HWREG1

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Email: sales@hawkingtech.com Email: techsupport@hawkingtech.com

HWREG1
Wireless-G Range Extender

ORDERING INFORMATION:

HWR54G HI-Speed Wireless-G Router
HWP54G HI-Speed Wireless-G PCI Card
HWC54G Hi-Speed Wireless-G Cardbus PC Card
HWU54D Hi-Speed Wireless USB Network Adapter

SPECIFICATIONS:

Network Specifications:
- IEEE802.11b/g (Wireless)
- IEEE802.3 (Wired)

Data Rate:
- 54/48/36/24/18/12/11/5.5/2/1Mbps auto fallback

Security:
- 64/128-bit WEP Data Encryption
- WPA, WPA2

Frequency Band: 2.400~2.4835GHz (Industrial Scientific Medical Band)

Wireless Transmit Power
- 18dBM

Antenna:
- External detachable dipole antenna (with RP-SMA connector)
- Upgradable using Hawking's Hi-Gain WiFi Range Extending Antennas and Boosters

Software and Management
- Advanced Software Setup Wizard
- Site survey tool for selecting wireless networks
- Management via web-based User Interface

Connectors:
- 10/100Mbps RJ-45 x 1

Power: DC 12V, 0.5A

LEDs:
- Power
- LAN Link/Activity
- Wireless Activity

Dimensions: 30(H) x 127(W) x 87(D) mm

Temperature:
- Operating: 10~40°C

Humidity: 10-90% (Non-condensing)

READY, NETWORK & GO!

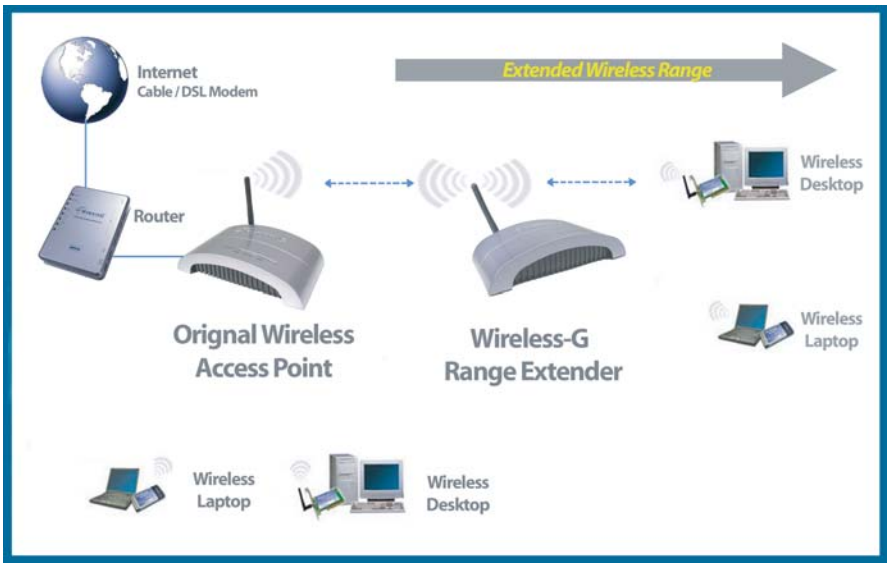
It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Insert the Setup Wizard CD and Scan for your network to extend

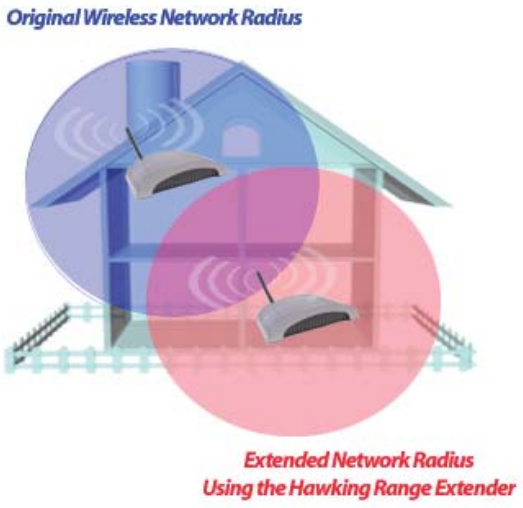
Step 2 - Place the Range Extender in your Desired Location

Step 3 - Power on the Unit

WIRELESS NETWORK DIAGRAM:



*The range will vary in different operating environments due to effects such as building construction.



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HAWKING® TECHNOLOGY

HWREN1

Hi-Gain™ Wireless N

Hi-Gain Wireless-300N Range Extender

PACKAGE CONTENTS:

- One Hi-Gain™ Wireless-300N Range Extender
- One Power Adapter
- One CD, includes PC Setup Wizard and User's Manual
- One RJ-45 Ethernet Cable
- Easy to follow Quick Installation Guide

Extend the Range of your Wireless Network

The HWREN1 effectively doubles the operating distance of your entire wireless network. Whether its an area in your home that has limited or no wireless coverage or a warehouse in your office, the Hawking Wireless-300N Range Extender takes the signal from your wireless access point and retransmits it at a higher rate. Simply place the Range Extender halfway between your Wireless Access Point and wireless trouble spot. The HWREN1 is the ONLY wireless repeater on the market that supports most wireless 802.11b/g/n networks and devices so you never have to worry whether the wireless network you have at your home or office will work with the Range Extender. The HWREN1 also features a new software setup wizard for hassle-free installation. To setup the Range Extender you simply load the Setup CD and scan for a network to extend.

Features

- Doubles the Range of your Wireless Network
- The Only Repeater that Works with MOST 802.11b/g/n Networks and Wireless Access Points
- New Setup Wizard allows for quick and easy setup
- Eliminates Wireless Dead Spots in your Home or Office

System Requirements:

- Pentium compatible PC or above w/ CD-ROM
- 802.11b or 802.11g or 802.11n Wireless Network

Apple ®, Apple Airport Extreme ®, Mac ®, and Powerbook ® are registered trademarks of Apple Computer, No affiliation is implied or expressed.

*Source: Independent Research Group. Wireless performance may vary due to environmental factors that can cause interference.

Hi-Gain Wireless-300N Range Extender

HWREN1

HAWKING TECHNOLOGIES, INC
15281 Barranca Parkway, Irvine, CA 92618
Sales: 888.662.8828, 949.790.0800 **Fax:** 949.790.0880
Email: sales@hawkingtech.com **Email:** techsupport@hawkingtech.com

Hi-Gain™ Wireless N

HWREN1
Hi-Gain Wireless-300N Range Extender

SPECIFICATIONS:

Network Specifications:
- IEEE 802.11b/g/n

Modulation
- 11b:DSSS with CCK, QPSK, BPSK
- 11g:OFDM with 64QAM, 16QAM
- 11n:OFDM with 64QAM, 16QAM, QPSK, BPSK

Transfer Rate
- 11b:1/2/5.5/11M
- 11g:6/9/12/18/24/39/48/54M
- 11n (20MHz):MCS 0-15 (up to 144Mbps)
  11n (40MHz):MCS 0-15 (up to 300Mbps)

Transmit Power
- 11n:15dBm±1dBm, 11g:15dBm±1dBm, 11b:17dBm±1dBm

Operating Frequency
- 2.4~2.4835 GHz

Security
- 64/128-bit WEP Data Encryption, WPA-PSK (TKIP, AES), WPA2-PSK(TKIP, AES), Radius Server

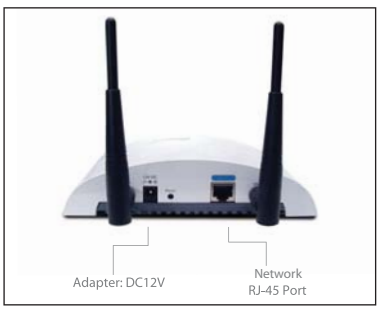
Antenna
- 3dBi Dipole Hi-Gain Antenna x 2

Power
- 12V DC

Operating Temperature
- 32~104°F (0 ~40°C)

Humidity
- Max. 90% (Non-Condensing)

Certification
- FCC , CE



Rear Ports

READY, NETWORK & GO!

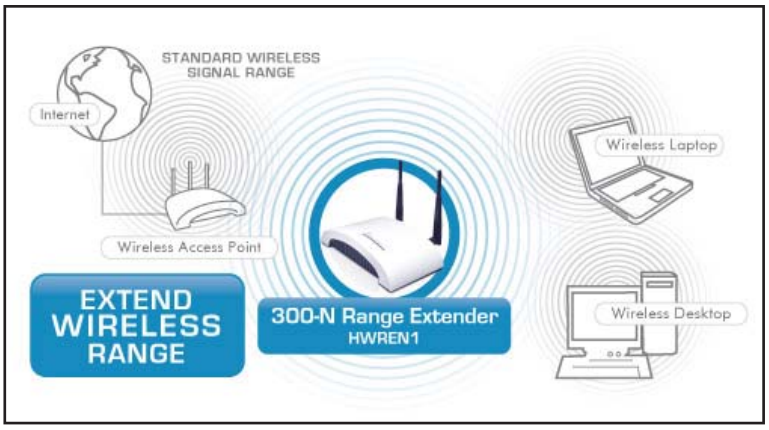
It's easy to install, it's easy to use! Everyone can do it.

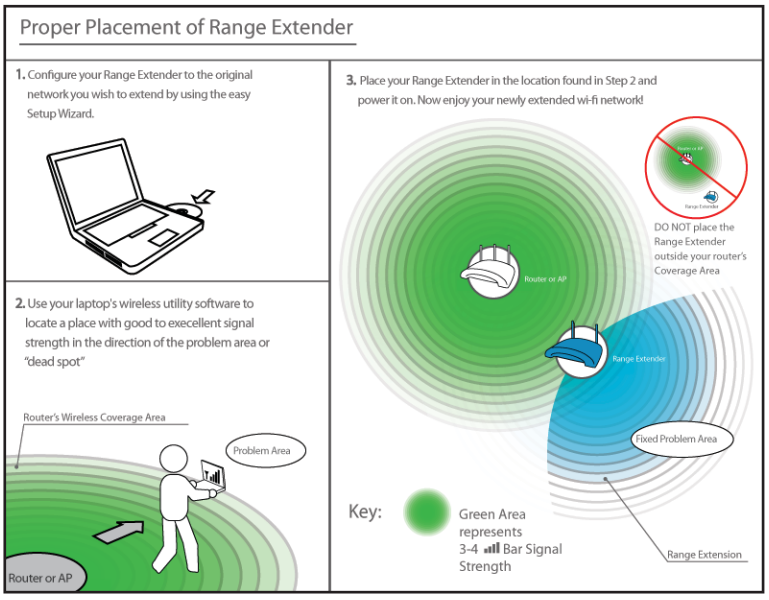
Step 1 - Connect the Hardware
Connect the Range Extender to your network AP/Router and power on.

Step 2 - Insert the Setup CD
Insert the included setup CD into your CD-ROM drive and run through the setup wizard.

Step 3 - Surf the Web Wirelessly
Unplug the Range Extender from the AP/Router and place in your desired location and enjoy wireless internet access throughout your home or office.

WIRELESS NETWORK DIAGRAM:




Proper Placement of Range Extender
1. Configure your Range Extender to the original network you wish to extend by using the easy Setup Wizard.
2. Use your laptop's wireless utility software to locate a place with good to execellent signal strength in the direction of the problem area or "dead spot"
Router's Wireless Coverage Area
Problem Area
Router or AP
3. Place your Range Extender in the location found in Step 2 and power it on. Now enjoy your newly extended wi-fi network!
DO NOT place the Range Extender outside your router's Coverage Area
Router or AP
Range Extender
Fixed Problem Area
Key:
Green Area represents 3-4 Bar Signal Strength
Range Extension

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HAWKING® TECHNOLOGY

2.4 GHz

HWU8DD

Hi-Gain USB Wireless-G Dish Networking Adapter

HWU8DD
Hi-Gain USB Wireless-G Dish Adapter

PACKAGE CONTENTS:
- One Hi-Gain USB Wireless-G Dish Adapter
- One CD, includes drivers, Software Utility and User's Manual
- Easy to follow Quick Installation Guide
- One USB Cable
- Hawking WiFi HotSpot Locator Software

Hi-Powered USB Wireless-G Adapter for your Desktop of Laptop PC!

The HWU8DD is designed to connect your desktop computer or laptop easily to any 802.11b or 802.11g wireless network via a USB 2.0 connection to your computer. Hawking's award winning Hi-Gain antenna technology extends wireless connection distances by up to 300%. The HWU8DD is equipped with a new 8dBi Directional Dish antenna that provides more distance, better connection speeds and a more reliable connection compared to most wireless adapters on the market. The new Hi-Gain Dish Antenna technology allows for a wider wireless reception radius while at the same time providing our strongest indoor antenna gain yet. The built-in LED signal strength indicators on the HWU8DD provide real-time network signal strength information to poinpoint the best connection within your area.

Features
- High Speed Wireless Networking for your Laptop or Desktop PC
- Advanced Directional Dish Antenna Designed for Excellent Wireless Range and Performance
- Hi-Gain 8dBi Antenna Extends Wireless Distance by up to 300% (Eliminates wireless dead spots)
- The Only Wireless Networking Adapter to integrate Dish Antenna Technology
- Setup Wizard installs the Dish Adapter in minutes

Systems Requirement:
- Pentium compatible or above w/ CD-Rom
- Windows 98SE, 2k, ME, XP
- One Available USB Port (USB 2.0 required for 54Mbps networking, USB 1.1 for 11mbps)
- 802.11b or 802.11g Wireless Network

HAWKING TECHNOLOGY

Hi-Gain USB Wireless-G Dish Adapter

HWU8DD

HAWKING TECHNOLOGIES, INC
15281 Barranca Parkway, Irvine, CA 92618
Sales: 888.662.8828, 949.790.0800 **Fax:** 949.790.0880
Email: sales@hawkingtech.com **Email:** techsupport@hawkingtech.com

HWU8DD
Hi-Gain USB Wireless-G Dish Adapter

READY, NETWORK & GO!

It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Insert the Installation CD and run the Setup Wizard

Step 2 - Connect the Adapter to your USB port

Step 3 - Connect to your Wireless network

ORDERING INFORMATION:

HWRGM1A - Hi-Gain Wireless-G MIMO Router
HWU54DM - Hi-Gain Mini Wireless-G USB Adapter
HWC54D - Hi-Gain Wireless-G Cardbus Card
HWREG1 - Hi-Gain Wireless-G Range Extender
HWL2 - Hi-Gain Wireless-G WiFi Locator

SPECIFICATIONS:

Network Specifications:
- IEEE802.11b/g (Wireless)

Host Interface
- USB 2.0 / 1.1 / 1.0

Device Interface
- Mini USB

Data Rate:
- 54/48/36/24/18/12/11/5.5/2/1Mbps auto fallback

Security:
- 64/128-bit WEP Data Encryption
- WPA, WPA2

Frequency Band: 2.400~2.4835GHz (Industrial Scientific Medical Band)

Wireless Transmit Power
- 23 ~ 24 dBm

Antenna:
- Hi-Gain Directional Dish Antenna (8 dBi gain)

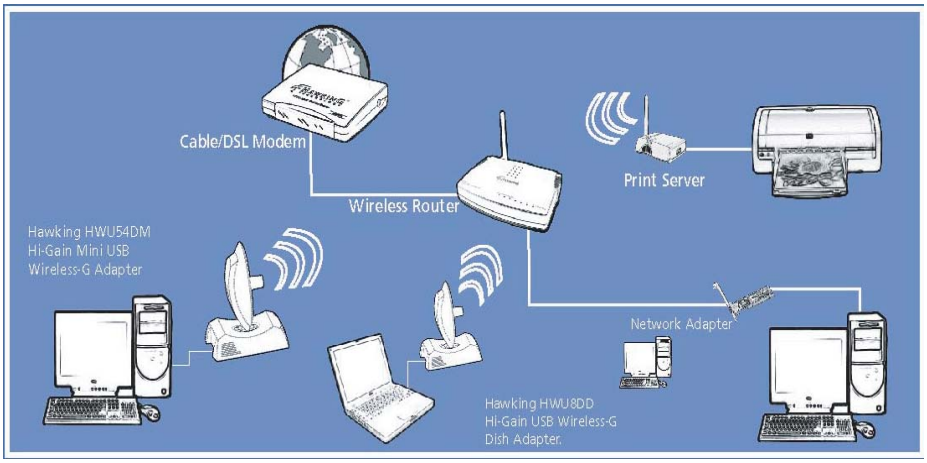
Software and Management
- Wireless Management Utility Software or Windows based utility

LEDs:
- Power
- Wireless Activity

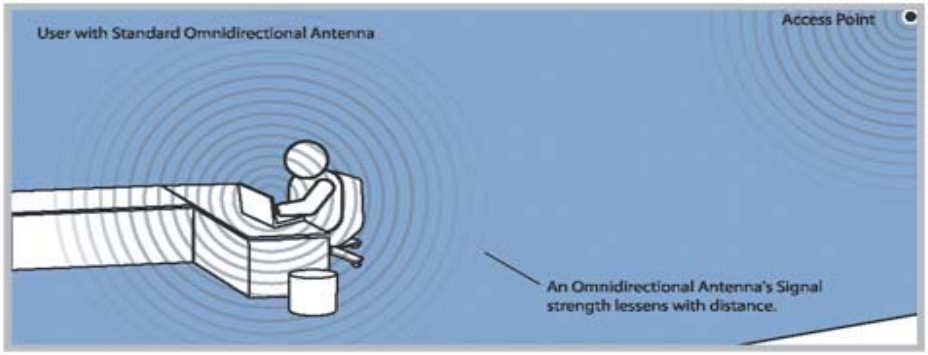
Temperature:
- Operating: 0~55°C

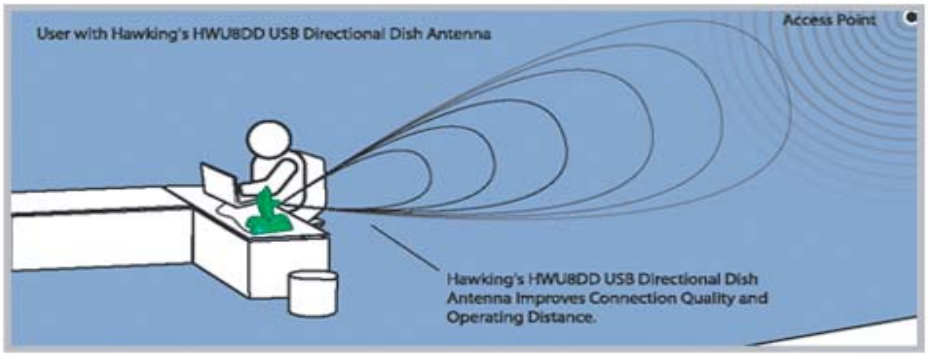
Humidity: Max 95% (Non-condensing)

WIRELESS NETWORK DIAGRAM:



PERFORMANCE DIAGRAM:


User with Standard Omnidirectional Antenna
Access Point
An Omnidirectional Antenna's Signal strength lessens with distance.


User with Hawking's HWU8DD USB Directional Dish Antenna
Access Point
Hawking's HWU8DD USB Directional Dish Antenna Improves Connection Quality and Operating Distance.

*The range will vary in different operating environments due to effects such as building construction.

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HAWKING® TECHNOLOGY

Hi-Gain™24

HAI7SIP

Hi-Gain Omni-Directional 7dBi Antenna

HAI7SIP

2.4GHz Hi-Gain Omni-Directional 7dBi Antenna

PACKAGE CONTENTS:

- One Hi-Gain 7dBi Antenna
- Easy to Follow Users Manual
- RP-SMA to RP-TNC Gold Series Connector Adapter

High Grade Antenna Design

Boost Your Wireless Experience

Hawking Technologies' HAI7SIP, 2.4GHz Hi-Gain WiFi antenna boosts your wireless signal strength from 2dBi (standard power) to 7dBi. A large problem with many wireless networks is the poor coverage area of standard Access Points and Wireless Routers. The Hawking HAI7SIP is an easy to install solution that plugs directly into the antenna port of your existing wireless device. By upgrading your external wireless antenna to a high grade 7dBi Hawking antenna your wireless signal strength, wireless operating distance and overall performance is significantly improved.

The advanced 7dBi Omni Direction Antenna is built with high grade material ensuring maximum quality and performance. New advancements in antenna design allow the antenna to perform more efficiently than other WiFi antennas on the market with the same gain level. Gold plated connectors and connector adapters create maximum conductivity for a solid link to the wireless device.

Hawking Hi-Gain Antennas are designed to work with all wireless devices with removable antennas. SMA and TNC connectors are included, others may be ordered directly from Hawking.

Features

- Increase your Wireless Network Signal Strength
- Works with Most Wireless Devices with Removable Antennas
- Compatible with 2.4GHz 802.11b/g Wireless Standards
- Hi-Grade Award Winning Design and Technology
- Gold Series Connectors for increased Performance
- Easy Installation

System Requirements:

- One Wireless 2.4GHz 802.11b/g Device with a Removable External Antenna
- Connector Type: Reverse SMA or Reverse TNC

Hi-Gain Omni-Directional Antenna

HAI7SIP

HAWKING TECHNOLOGIES, INC
15281 Barranca Parkway, Irvine, CA 92618
Sales: 888.662.8828, 949.790.0800 Fax: 949.790.0880
Email: sales@hawkingtech.com Email: techsupport@hawkingtech.com

HAI7SIP

Hi-Gain 2.4GHz Omni-Directional 7dBi Antenna

ORDERING INFORMATION:

HWR54G HI-Speed Wireless-G Router
HWP54G HI-Speed Wireless-G PCI Card
HWC54G Hi-Speed Wireless-G Cardbus PC Card
HAO9SDP Hi-Gain 9dBi Outdoor Directional Antenna
HAI15SC Hi-Gain 15dBi Corner Antenna

SPECIFICATIONS:

Network Specifications:
- IIEEE 802.11b/g

Operating Frequency
- 2.4~2.4835 Ghz

Electrical Properties
- Impedence: 50 Ohms Nominal
- Gain: 7dBi
- Polorization: Vertical

Cable
- Low Loss Cable: 2.5ft

Connectors
- Gold Plated Reverse SMA Plug
- Gold Plated Reverse TNC Plug

Dimensions
- 22.5 (H) x 8.5 (W) x 8.5 (L) cm

Hi-Gain™24

READY, NETWORK & GO!

It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Unscrew your Wireless Device's Antenna
Unscrew the current antenna on the device you plan to attach your Hi-Gain antenna to.

Step 2 - Screw in your Hi-Gain Hawking Antenna
Connect your new Hi-Gain Wireless Antenna to your device by screwing on the SMA connector attached to the end of the Antenna Cable.

Step 3 - Position your Antenna
Choose the optimal position for your antenna (on the wall, on your desk...) and power on your wireless LAN.

WIRELESS NETWORK DIAGRAM:

Features	Benefits
TriBand/SingleBand Modes	Works with popular Wireless Standards
Reverse SMA Plug	Compatible with most Access Points / Adapters
7dB External Antenna	Ensures optimal coverage
Supports all network operating systems	Setup is quick and simple

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HAWKING TECHNOLOGY®

Hi-Gain™24

HA12W

Hi-Gain™ 12dBi Directional Window Antenna

HA12W

2.4GHz Hi-Gain 12dBi Directional Window Antenna

PACKAGE CONTENTS:

- One 12dBi Directional Window Antenna
- 50cm Extension Cable (N-Plug to Rev. SMA Plug)
- TNC Adapter
- Window/Wall Mounting Kit
- One User's Manual

Extend the Distance of your Wireless Devices up to 2 miles

The Hawking 12 dBi Hi-Gain Wi-Fi Directional Window Antenna boosts your wireless signal from a standard 2dBi to 12dBi. It is an easy to install solution that plugs directly into an antenna port of your wireless device (router or adapter).* The HA12W is built with high grade material ensuring maximum quality and performance.The power rating of WiFi antennas is measured in terms of decibels (dBi). The HA12W boosts the antenna power of standard antennas from a minimal 2dBi to a staggering 12dBi. This results in extended wireless distances of up to 2 miles.* Whether extending the wireless network from one corporate building to another, or simply from the front house to the back house, the Directional Window Antenna provides wireless users with a high powered solution to extend their wireless network.

Installation of the HA12W is simple and straight forward. It is compatible with most wireless devices (Access Points, Routers, Bridges and Network Adapters) on the market with removable external antennas. The Hawking Antenna comes equipped with RP-SMA, RP-TNC connectors to support a wide range of wireless devices. For those devices that use adapters not included in the packaging, please visit the Hawking Technologies website for a selection of specific connectors for your device.

Features

- 2.4 GHz Frequency - Works with popular Wireless Standards
- Reverse SMA Plug - Compatible with most Access Points/Adapters
- TNC Adapter is included for Cisco & Linksys Routers
- A 12dBi Directional Antenna - Ensures optimal coverage
- Supports all network operation systems
- Setup is quick and simple

System Requirements:

- One Wireless 2.4GHz 802.11b/g Device with a Removable External Antenna
- Connector Type: Reverse SMA or Reverse TNC

*Results may vary due to different operating environments.

Hi-Gain 12dBi Directional Window Antenna

HAWKING TECHNOLOGIES, INC

USA: Irvine, California
Sales: 888.662.8828 or 949.790.0800
Email: sales@hawkingeurope.com
Fax: 949.790.0880
Email: customersupport@hawkingtech.com

EUROPE: Rotterdam, The Netherlands
Sales: 31-10-245-1600
Email: sales@hawkingeurope.com
Fax: 31-(0)10-245 1616
Email: customersupport@hawkingeurope.com

HA12W

Hi-Gain™24

Hi-Gain 12dBi Directional Window Antenna

SPECIFICATIONS:

Network Specifications:
- IEEE 802.11b/g

Electrical Properties
- Frequency: 2.4~2.4835 Ghz
- Impedence: 50 Ohms Nominal
- Gain: 12dBi
- Radiation: Directional
- Polorization: Linear, Vertical
- H-Plan:84°
- E-Plan: 23°

Mechanical Properties
- Connector: RP-SMA

Material Properties
- Color:Ivory
- Dimensions: 327mm x 80mm x 22mm
- Weight: 0.5 lbs (excluding cables and mounts)

Warranty
- 1 year

RELATED PRODUCTS

Outdoor

HAC30N	30 ft. Outdoor N-Plug Hi-Gain Antenna Cable
HAO9SIP	Hi-Gain 9dBi Outdoor Omni-Directional Antenna Kit
HAO9SDP	Hi-Gain 9dBi Outdoor Directional Antenna Kit
HAO14SDP	Hi-Gain 14dBi Outdoor Omni-Directional Antenna Kit

Indoor

HA12W	Hi-Gain 12dBi Indoor Window Antenna
HAO15SC	Hi-Gain 15dBi Indoor Corner Antenna
HAI7SIP	Hi-Gain 7dBi Indoor Omni-Directional Antenna
HAI7MD	Hi-Gain 7dBi Compact Indoor Directional Antenna

READY, NETWORK & GO!

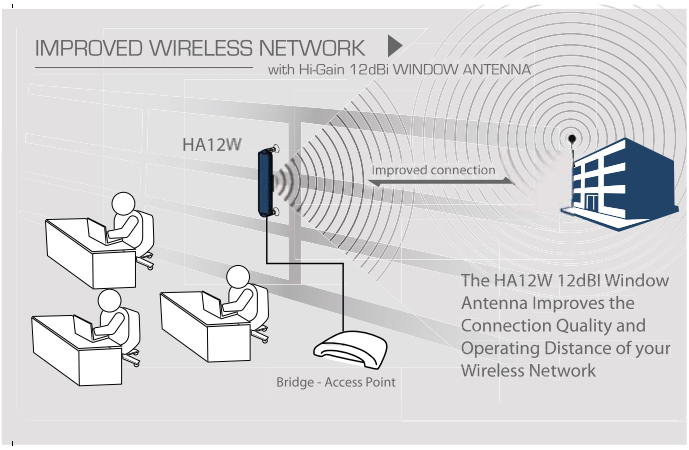
It's easy to install, it's easy to use! Everyone can do it.

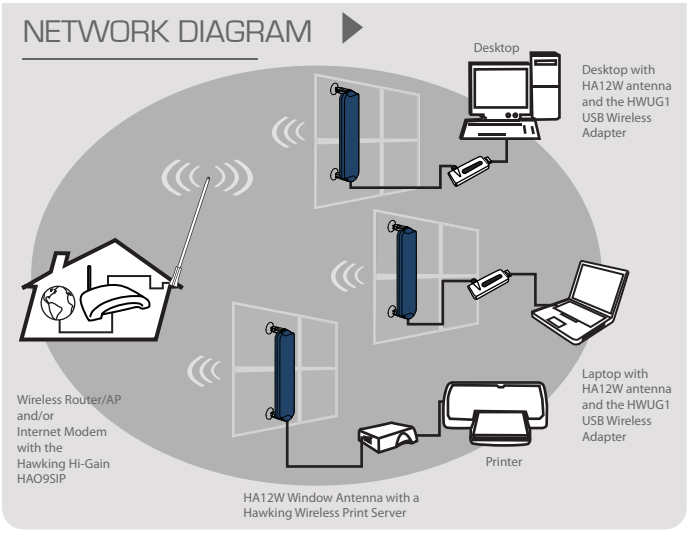
Step 1 - Unscrew your Wireless Device's Antenna
Unscrew the current antenna on the device you plan to attach your Hi-Gain antenna to.

Step 2 - Screw in your Hi-Gain Hawking Antenna
Connect your new Hi-Gain Wireless Antenna to your device by screwing on the SMA connector attached to the end of the Antenna Cable

Step 3 - Position your Antenna
Choose the optimal position for your antenna (on the window, or your wall...) and power on your wireless LAN.

WIRELESS NETWORK DIAGRAM:


IMPROVED WIRELESS NETWORK
with Hi-Gain 12dBi WINDOW ANTENNA
HA12W
improved connection
The HA12W 12dBI Window Antenna Improves the Connection Quality and Operating Distance of your Wireless Network
Bridge - Access Point


NETWORK DIAGRAM
Desktop
Desktop with HA12W antenna and the HWUG1 USB Wireless Adapter
Laptop with HA12W antenna and the HWUG1 USB Wireless Adapter
Printer
Wireless Router/AP and/or Internet Modem with the Hawking Hi-Gain HAO9SIP
HA12W Window Antenna with a Hawking Wireless Print Server

Specifications are subjet to change without notice. ©2007 Hawking Technologies, Inc. All Rights Reserved.

HAWKING® TECHNOLOGY

Hi-Gain Corner Antenna

CONNECT WHEREVER YOU WANT · WHENEVER YOU WANT

CAREFREE WIRELESS

HAI15SC

Hi-Gain Antenna

PACKAGE CONTENTS:

- One Hi-Gain Antenna with Cable and Connector
- One HACST Reverse TNC Connecotor Adaptor
- One HACSA MCX Connector Adaptor
- Easy to follow Quick Installation Guide
- Corner Mountng Kit

Get Connected With Hawking

- Increase Your Wireless Network Strength
- Works with 2.4GHz 802.11b /g Wireless Standards
- Extend your Network Range
- Great for Large Conference Rooms or Open Spaces
- East Installation (No Software Required)

Boost Your Wireless Experience

Hawking Technologies' HAI15SC, 2.4GHz Hi-Gain Wireless Corner Antenna, boosts your wireless strength from 2dBi (standard) to 15dBi! A large problem with many wireless networks is the poor coverage area of standard Wireless networks. Hawking solves this problem with a Hi-Gain antenna that attaches directly to the external antenna connector of your Wireless Access Point or Wireless Network Adaptor. By increasing the strength of your external wireless antenna, your Wireless Network distance, signal strength and performance is significantly improved. Simply point your Wireless Directional Antenna in the direction of your Access Point or Network Adaptor and easily extend your range and quality.

Full Support & Easy Installation - One Perfect Solution

The Hi-Gain Corner Antenna is the perfect solution for providing Wireless coverage in very large rooms, conference halls or buildings. The high power level of the antenna ensures full wireless coverage. The Hi-Gain Antenna has been specifically designed for easy installation in the corner of a wall. This also allows for easier coverage of an entire building, room or wall.

Hawking's Hi-Gain Antennae are designed to work with all Wireless Access Points, Wireless Routers and Wireless Network Adaptors that have removable external antennae. By using the popular Reverse-SMA connector, the Hawking Hi-Gain Antenna can be used on most wireless devices that share the same connector. Hawking has also provided added support by including two antenna connectors for specialized wireless devices.

Systems Requirement:

- One Wireless Device with an external Antenna connector
- Connector type: Reverse SMA Jack or Reverse TNC (Linksys, Cisco devices); MCX Connector (Apple Airport Extreme)

Hi-Gain 15dBi 2.4GHz Corner Antenna

CONNECT WHEREVER YOU WANT · WHENEVER YOU WANT

CAREFREE WIRELESS

HAI15SC

High-Gain Antenna
One Year Warranty

HAWKING TECHNOLOGIES, INC
15281A Barranca Parkway, Irvine, CA 92618
Sales: 888.662.8828, 949.790.0800 **Fax:** 949.790.0880
Email: sales@hawkingtech.com **Email:** techsupport@hawkingtech.com

READY, NETWORK & GO!

It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Unscrew Your External Antenna
Unscrew and remove your current external wireless antenna from your Access Point or Wireless Router.

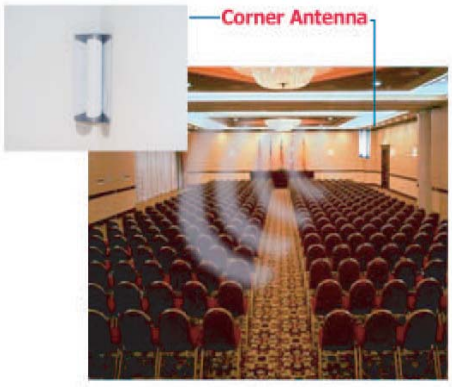
Step 2 - Screw in the Hawking Antenna
Screw in the SMA Connector (or your connector adapter) from the Hawking Hi-Gain Antenna.

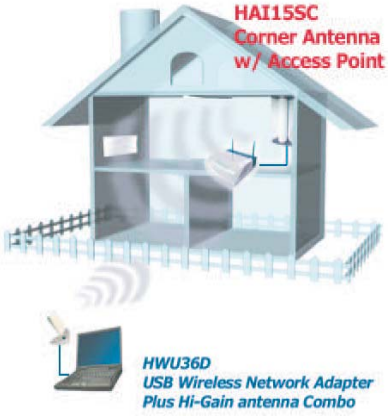
Step 3 - Position Your Antenna
Mount or position your antenna towards your desired coverage location and you are ready to go!

ORDERING INFORMATION:

HWR54G	Wireless-G Router
HWP54G	Wireless-G PCI Card (Desktop)
HWB54G	Wireless-G Bridge/AP
HWGA11	Wireless Gaming Adapter
HWR258	Wireless-B Router
HWP102	Wireless-B PCI Card (Desktop)
WB320	Wireless-B Bridge
WA300	Wireless-B Access Point
HAI6SIP	Hi-Gain 6dBi Omni Directional Antenna
HAI6SDP	Hi-Gain 6dBi Directional Antenna

CORNER ANTENNA NETWORK DIAGRAM:





SPECIFICATION:

Network Specification
- IEEE 802.11b
- IEEE 802.11g
- Wireless 2.4 GHz Network

Operating Frequency: 2.4 ~ 2.4835GHz

Electrical Properties:
- Gain 15 dBi
- Polarization Vertical
- Impedance 50 Ohms nominal
- SWR Less than 1.6

Connector: Reverse SMA Plug

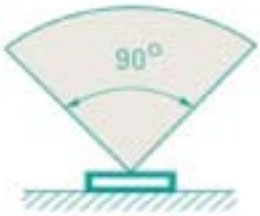
Connector Adapters:
- Reverse TNC Plug
- MCX Plug

Cable:
- HPT-100
- Length 5ft

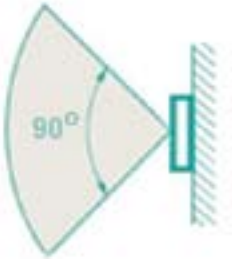
Mounting:
- Corner Wall Mount Kit
- Wall Mount, Table Mount, Floor Mount

WIRELESS PATTERN (DIRECTIONAL)

Overlook



Horizontal Coverage



Vertical Coverage

*The range will vary in different operating environments due to effects such as building construction.

Features	Benefits
2.4 GHz Frequency	Works with popular Wireless Standards
Multiple Connectors included	Compatible with most Access Points / Adapters
15dBi External Antenna	Ensures optimal coverage
Supports all network operating systems	Setup is quick and simple
Designed for corner mounting	Easy placement for expanded coverage

HAWKING TECHNOLOGY

Hi-Gain™24

HAO15SIP

Hi-Gain™ 15dBi Outdoor Omni-Directional Antenna Kit

HAO15SIP

2.4GHz Hi-Gain 15dBi Outdoor Omni-Directional Antenna Kit

PACKAGE CONTENTS:

- One 15dBi Omini-Directional Antenna
- 50cm Extension Cable (N-Plug to Rev. SMA Plug)
- TNC Adapter
- Surge Protector (N-Plug to N-Jack)
- Waterproof Tape
- Mounting Kit
- Quick Installation Guide

Extend the Distance of your Wireless Devices up to 2 miles

The HAO15SIP Hi-Gain Outdoor 15dBi Omni-Directional Antenna Kit is a heavy-duty, weather proof, high powered antenna for extending the range of your 802.11b and 802.11g WiFi devices. Whether your application requires extending a wireless signal from one building to another or simply from one end of a house to the other, the Hi-Gain Directional Antenna Kit from Hawking is the perfect solution. The power rating of WiFi antennas is measured in terms of decibels (dBi). The HAO15SIP boosts the antenna power of standard antennas from a minimal 2dBi to a staggering 15dBi. This results in extended wireless distances of up to 2 miles.* Whether extending the wireless network from one corporate building to another, or simply from the front house to the back house, the Outdoor Antenna Kits provide wireless users with a high powered solution to extend their wireless network.

The Outdoor Omni-Directional Antenna emits a powerful amplified signal over a 360 degree radius., delivering a strong multi-direction signal from an Access Point or a Bridge. If you have multiple locations or buildings where you would like to integrate your wireless network, simply place the HAO15SIP in between the buildings with your Acess Point. It is most effective when placed at the top of buildings or in the center of large rooms. The HAO15SIP also comes with a mounting kit, connectors, and a surge protector.

Installation of the HAO15SIP is simple and straight forward. It is compatible with most wireless devices (Access Points, Routers, Bridges and Network Adapters) on the market with removable external antennas. The Hawking Antenna comes equipped with N-Type, RP-SMA, RP-TNC connectors to support a wide range of wireless devices. For those devices that use adapters not included in the packaging, please visit the Hawking Technologies website for a selection of specific connectors for your device.

Features

- 2.4 Ghz Frequency - Works with popular Wireless Standards
- Reverse SMA Plug - Compatible with most Access Points/Adapters
- TNC Adapter is included for Cisco & Linksys Routers
- A 15dB External Outdoor Omni-Directional Antenna - Ensures optimal coverage
- Supports all network operation systems
- Setup is quick and simiple

System Requirements:

- One Wireless 2.4GHz 802.11b/g Device with a Removable External Antenna
- Connector Type: Reverse SMA or Reverse TNC

*Results may vary due to different operating environments.

Hi-Gain Outdoor 15dBi Omni-Directional Antenna Kit

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HAO15SIP

Hi-Gain™24

Hi-Gain 15dBi Outdoor Omni-Directional Antenna Kit

SPECIFICATIONS:

Network Specifications:
- IIEEE 802.11b/g

Electrical Properties
- Frequency: 2.4~2.4835 Ghz
- Impedence: 50 Ohms Nominal
- Gain: 15dBi
- Radiation: Omni
- Polorization: Vertical
- H-Plan:360º
- E-Plan: 30º

Mechanical Properties
- Connector: RP-SMA and N-Plug

Material Properties
- Color:White & Silver
- Body: Brass & Ni Plating
- Pin: Phosphor Bronze Gold
- Insulator:Teflon or Delrin
- Dimensions: 48 (H) x 1 (r) in (w/out joint)
- Weight: 2.2 lbs

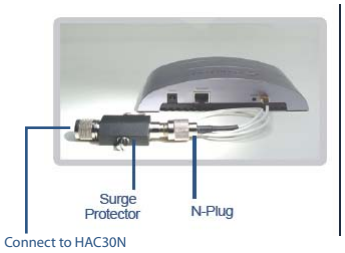
Warranty
- 1 year

READY, NETWORK & GO!

It's easy to install, it's easy to use! Everyone can do it.

Preinstallation - The HAC30N outdoor cable is sold seperately and required for outdoor installation

Step 1 - Connect Extension Cable to your Access Point
Remove the original antenna from your Wireless Access Point and attach the Rev. SMA connector from the Extension Cable (white color cable) to your Access Point's antenna connector



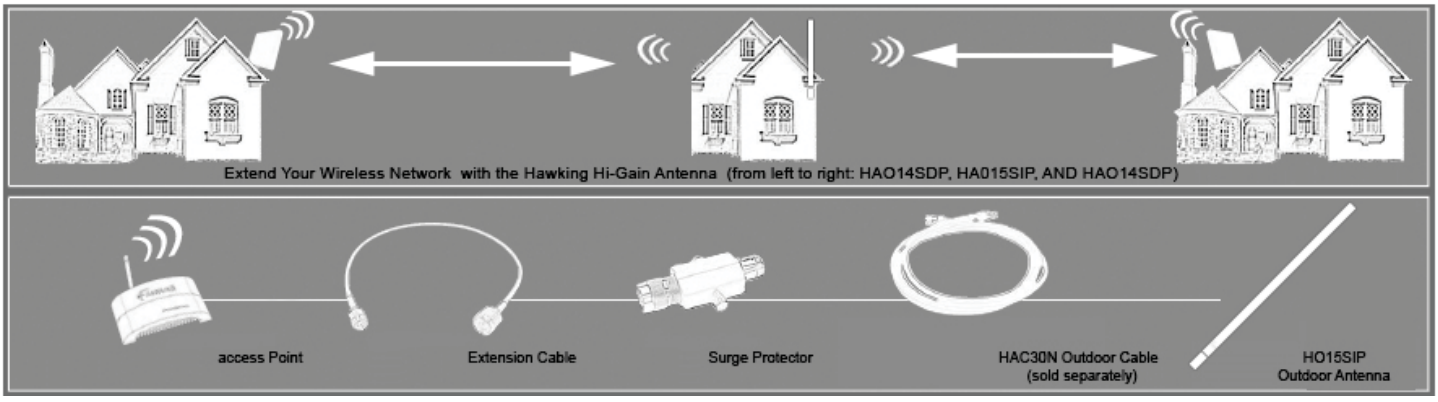
Step 2 - Install the Surge Protector
After you have attached the Extension Cable to your Wireless Access Point, install the Surge Protector to the N-Plug at the opposite end of the Extension Cable.

Step 3 - Connect to the Antenna and Protect it from weather damage
Once you have successfully grounded your Surge Protector, connect the other end to the N-Plug Extension cable (HAC30N). Then, please take the Water-Proof Tape and tape the metal connectors that are exposed to the outdoors to prevent any damage from weather. After your antenna is completely connected, safely mount your antenna to a pole or wall. (See QIG for instructions on how to assemble for wall or pole mounting).

RELATED PRODUCTS

Outdoor	
HAC30N	30 ft. Outdoor N-Plug Hi-Gain Antenna Cable
HAO9SIP	Hi-Gain 9dBi Outdoor Omni-Directional Antenna Kit
HAO9SDP	Hi-Gain 9dBi Outdoor Directional Antenna Kit
HAO14SDP	Hi-Gain 14dBi Outdoor Omni-Directional Antenna Kit
Indoor	
HA12W	Hi-Gain 12dBi Indoor Window Antenna
HAO15SC	Hi-Gain 15dBi Indoor Corner Antenna
HAI7SIP	Hi-Gain 7dBi Indoor Omni-Directional Antenna
HAI7MD	Hi-Gain 7dBi Compact Indoor Directional Antenna

WIRELESS NETWORK DIAGRAM:


Extend Your Wireless Network with the Hawking Hi-Gain Antenna (from left to right: HAO14SDP, HA015SIP, AND HAO14SDP)
access Point
Extension Cable
Surge Protector
HAC30N Outdoor Cable (sold separately)
HO15SIP Outdoor Antenna

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HAWKING® TECHNOLOGY

CAREFREE WIRELESS

Hi-Gain Omni-Directional 2.4 GHz 9dBi Outdoor Antenna Kit

CONNECT WHEREVER YOU WANT · WHENEVER YOU WANT

HAO9SIP

Hi-Gain Omni-Directional
2.4Ghz 9dBi Antenna
802.11b/g Wireless Standard
One Year Warranty

PACKAGE CONTENTS:

- One Hi-Gain Outdoor Wireless Omni-Directional Antenna
- RP-SMA Cable for Wireless Device (Indoor Cable)
- TNC Jumper Cable
- Mounting Kit
- Surge Protector
- Water-proof Tape
- User's Manual

Get Connected With Hawking

- Increase Your Outdoor Wireless Network Strength
- Works with 2.4Ghz 802.11b /g Wireless Standards
- Extend your Network Range up to 1.5 miles
- 360 Degree Signal Amplification
- Easy Installation (No Software Required)
- Free Tech Support

Boost Your Wireless Experience (Extend your Wireless Network Range up to 1.5 miles!)

Hawking Technology's HAO9SIP, 2.4 GHz Hi-Gain Wireless Outdoor Omni-Directional Antenna kit, boosts your wireless signal strength from 2dBi (standard) to 9dBi! The Hi-Gain Omni-Directional Antenna lets you extend your wireless network into multiple areas. By emitting your amplified wireless signal in a 360° radius, the HAO9SIP increases your network coverage evenly among multiple locations. Our engineers have optimized the design of this product to ensure the performance and quality of the antenna. When paired with another Hawking Hi-Gain 24 Series Wireless Antenna, increased ranges of up to 1.5 miles may be achieved. Whether your application requires sharing your wireless connection from one corporate building to surrounding buildings, or, from your house to an outside yard, the Hawking Hi-Gain Outdoor Antenna kits are the perfect solution.

Hawking's Hi-Gain Antennas are designed to work with all Wireless Access Points, Wireless Routers and Wireless Network Adapters that have removable external antennas. Pairing the Outdoor Antenna with Hawking's Wireless Devices is recommended, however, not required. The HAO9SIP is designed with the popular RP-SMA connector, which works with many major Wireless Brands. It also comes with the TNC jumper cable for wider range of compatibility. Simply unscrew your current antenna and screw on Hawking's Hi-Gain antenna and you're ready to go!

The Outdoor Antenna Kit comes with everything you need to mount and secure your Hi-Gain network. The included antenna surge protector protects your valuable wireless equipment from damage caused by electrical surges or lightning on your antenna. The mounting kit is complete with all the nuts and bolts necessary to mount your antenna on a wall or a pole, except for the N-Plug extension cable. There are two N-Plug extension cables available, 10ft (HAC10N) and 30ft (HAC30N). Prior to to installation, remember to purchase the N-Plug extension cables. Note: It is best to measure the distance prior to purchasing the N-Plug extension cable. A shorter cable can minimize the performance loss due to cabling.

Systems Requirement:

- One Wireless Device with an external Antenna connector

Hi-Gain Omni-Directional 2.4 GHz 9dBi Wireless Antenna Kit

CONNECT WHEREVER YOU WANT · WHENEVER YOU WANT

CAREFREE WIRELESS

HAO9SIP

Hi-Gain Omni-Directional

2.4Ghz 9dBi Outdoor Antenna (802.11b/g)

One Year Warranty

HAWKING TECHNOLOGIES, INC

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Europe: Rotterdam, The Netherlands
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Email: sales@hawkingeurope.com
Tel: 31.10.245.1600

WIRELESS NETWORK DIAGRAM:

H-AO14SD
Connect to a Wireless Bridge
H-AO9SIP
Connect to a Wireless Access Point
H-AO14SD
Connect to a Wireless Bridge
Increase your wireless distance up to 1.5 miles with the HA09SIP

RELATED PRODUCTS:

(Wireless Devices w/ SMA Connectors)

HA08SI	Omni-Directional 8dBi Outdoor Hi-Gain Antenna
HAO14SD	Directional 14dBi Outdoor Hi-Gain Antenna Kit
HAI15SC	Hi-Gain Corner Antenna 15dBi
HAI6SDP	Hi-Gain 6dBi Directional Antenna
HAC10N	N-Plug Outdoor Cable Extension 10 feet
HAC30N	N-Plug Outdoor Cable Extension 30 feet

READY, NETWORK & GO!

It's easy to install, it's easy to use! Everyone can do it.

Step 1 - Unscrew Your External Antenna

Unscrew and remove your current external wireless antenna from your Access Point or Wireless Router

Step 2 - Screw in the Hawking Antenna

Screw in the SMA Connector from the Hawking Hi-Gain Antenna

Step 3 - Mount and Connect Your Antenna

Mount your outdoor antenna in your desired location and connect the rest of the cables. It's that easy!

SPECIFICATIONS:

Network

- IEEE 802.11b WLAN Standard
- IEEE 802.11g WLAN Standard
- Wireless 2.4 GHz Network

Operating Frequencey

- 2.4 ~ 2.4835 GHz

Electrical Properties

- Impedance 50 Ohms nominal
- Gain 9.0 dBi
- Polorization Linear, Vertical
- H-plane 360°
- E-plane 15°

Mounting

- Pole Mountable
- Wall Mountable

Mechanical Properties

- Connector: RP-SMA, N-Plug
- Cable: HDF400 (AC10N/AC30N)
- Dimension: L x W x H
  620.5 x 45 x 45 mm
- Weight: 477g (without joint)

ANTENNA COVERAGE DIAGRAM:

HAO14SD
DIRECTIONAL ANTENNA
DIRECTIONAL ANTENNA

HAO9SIP
OMNI-DIRECTIONAL ANTENNA

HAO14SD

* For Indoor Application, please visit Hawking's webiste for HAI6SIP, HAI6SIA, HAI6SDP, HAI6SDA, and HAI15SC
** For Apple Airport Extreme, please refer to HAI6SIA and HAI6SDP

Features	Benefits
2.4 GHz Frequency	Works with all 802.11b/g Wireless Standards
Reverse SMA Plug	Compatible with most Access Points / Adapters
9dBi External Onmi- Directional Antenna	Ensures optimal coverage
360 Degree Signal Amplification	Increase your outdoor wireless network strength Extend your Network Range up to 1.5 miles

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